



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

RBE350A93-3317-20
Job Sheet 173863



Part No: RBE350A93-3317-20

Job Qty: 24 ea

Part Name: Tail Rotor Hub Insert Tool



Part Weight: 0 lbs

Status: Scheduled

Priority: High

Job Created: 3/8/18

Job Tracking No:

Due Date: 7/19/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBE350A93-3317-20 REV: 1B IPP REV: A 18.01.15 NEW ISSUE RQ VERIFIED BY: DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	24 Ea	7/19/18	7/19/18	0.00	0.00	Start Up Machining-4		
120	CNC Lathe	24 pcs	7/19/18	7/19/18	0.00	2.00	MORI SL2500Y		
130	QC	24 pcs	7/19/18	7/19/18	0.00	0.00	QC2		
140	QC	24 pcs	7/19/18	7/19/18	0.00	0.00	QC8 Machining-2		
170	Outsource	24 pcs	7/19/18	7/19/18			GRO002-VC	10	
180	Packaging	24 pcs	7/19/18	7/19/18	0.00	0.00	Packaging2		
185	QC	24 pcs	7/19/18	7/19/18	0.00	0.00	QC6		
190	Packaging	24 pcs	7/19/18	7/19/18	0.00	0.00	Packaging3		
210	QC21-FG	24 Ea	7/19/18	7/19/18	0.00	0.00	QC21		

Part Op 120 - 1-Machine as per folio FB742 FOLIO REV: AA DWG REV: 1B 2-Deburr Engrave T/N And /
Descriptions: or S/N number as required Using Marktronic engraver as per DWG.

170 - Issue P/O to Groupe Altech; PO -Black oxide finish, MIL-C-13924C Class 1 -Certificate of
Conformity is required
180 - Receive

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
MT-4140QT-R2.250	AISI 4140 Q&T Round Bar	7.9200 ft (.33 ea) 1.9375 0.3875	90-Start up Operation	5038524

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	MT-4140QT-R2.250	8	18	0

Part Specifications

Specifications could not be found.



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Plex 7/19/18 4:31 PM dart.log

Container No: S096435



Part: RBE350A93 - 3317 - 20

Job No: 173863

Serial No/Batch: S096435

Revision: 1B

Inspector:

Exp Date:

Instructions:

Date: 07/25/18

rt_Viewer_2.asp?URL=../Part/Job_Sheet.asp&f

WORK ORDER NON-CONFORMANCE / UPDATE

QA closed: _____ Date: _____

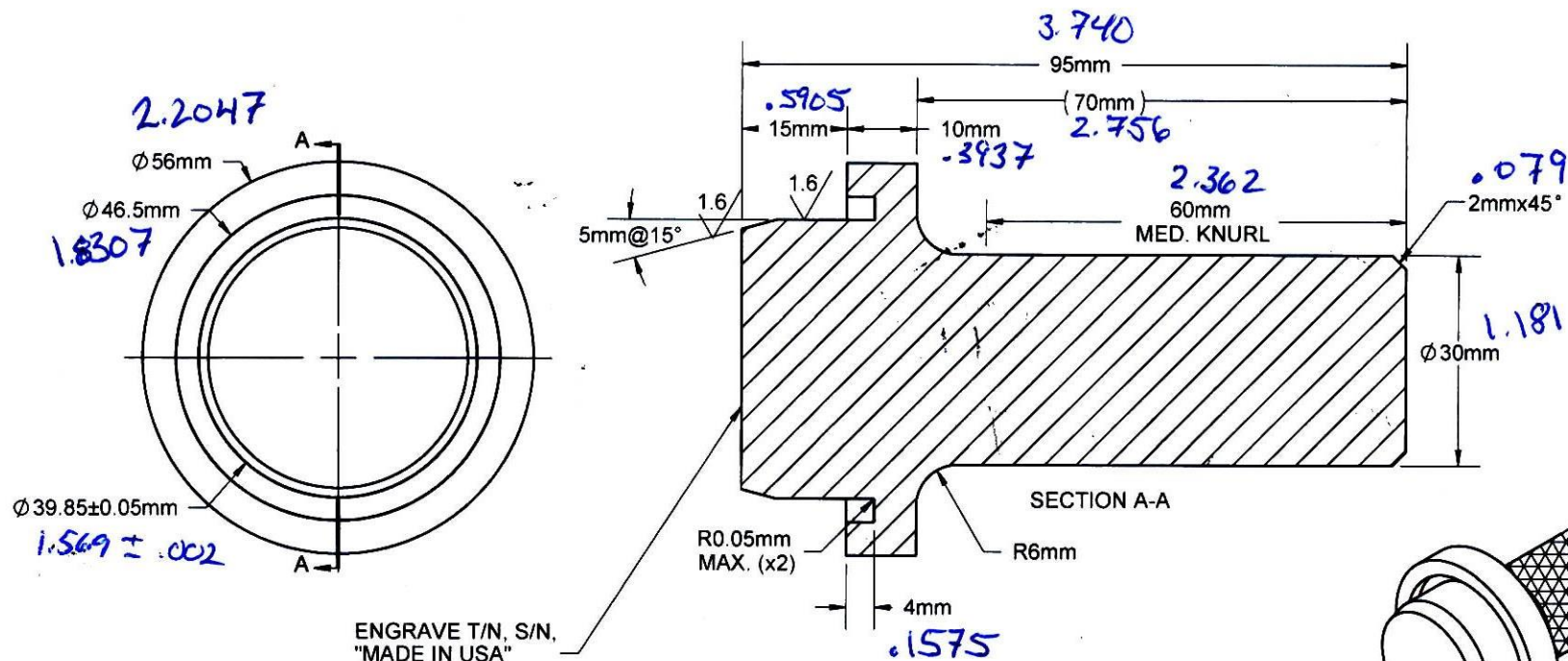
Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation			Disposition		Completed By
					Lead hand / Supervisor Approval Verification
					QC / QA Coordinator Approval
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐			FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐		
OTHER :					

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REVISIONS			
REV	DESCRIPTION	DATE	INITIAL
1	DESIGNED PER HELI PRODUCTS TOOLS	9/28/09	WP
1A	ADDED ENGRAVE NOTE & 70mm REF. DIMENSION.	10/4/11	RJC
1B	CH'D T/N WAS RBEA93-3317-20 IS RBE350A93-3317-20	11/6/13	RJC
			DW
			DW
			RW



NOTE:
1. CENTERS OK.

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 173863
20180719

RED BARN MACHINE	
TITLE TAIL ROTOR HUB INSERT TOOL	
DWG NO. RBE350A93-3317-20	REV 1B
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES	
TOLERANCES ON: DECIMALS XXX ± .005 XX ± .01 X ± .1	METRIC ± 0.1 FRACTIONS ± 1/32 ANGLES ± 5°
DRAWN BY PERRITT	
APPROVED	
HEAT TREAT FINISH SPEC BLACK OXIDE	
USED ON MODEL EUROCOPTER	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES Ø15 x 45° PR Ø15 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE NTS	DATE 9-28-09
SHEET 1 of 1	

ASSY QTY	ASSY QTY	B/O	PART #	UNIT QTY	DESCRIPTION	MATERIAL	B/O INFORMATION OR SPECIFICATIONS	Pg.
				1	INSERT TOOL	4140 Q&T	Ø2-1/4 in. x4 in.	
ASSY #								



20 Terry Fox Drive
Vankleek Hill, Ontario K0B 1R0 , Canada
Tel: (613) 678-3957
Fax: (613) 678-3956

Delivery Slip No.: 22852
Date: Aug 14, 2018
Page: 1

Sold to: Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, Ontario K6A 1K7	Ship to: Dart Aerospace Ltd. 1270 Aberdeen Street Hawkesbury, Ontario K6A 1K7
Order No.: PO040730	Sold By: Walz, Christian D.
Shipped By: pick up	Ship Date: Aug 14, 2018

Description	Bin Loc	Unit	Quantity ordered	Quantity shipped	Quantity on B/O
Black oxide process on 5 parts RBE350A93-3317-20 Tail Rotor Hub Insert ✓ CL AUG 15 2018		Each	1	1	
The delivered goods must be inspected upon receipt to confirm compliance. Should there be discrepancies please notify METEC within 30 days of delivery. The goods are otherwise deemed accepted.					
Received by _____		Thank you for your order!			



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Canada

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PURCHASE ORDER **PO040730**

Supplier: MEM001-VC
Metec Metal Technology Inc.
20 Terry Fox Drive PO Box 781
Vankleek Hill
ON
K0B 1R0 Canada
Phone: 613 678 3957
Fax: 613 678 3956

Attention: Walz, Shigi

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO040730

PO Date: 8/13/18

Due Date: 8/15/18

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

Via: Ground

Pymt Terms: Net 60

Freight Terms:

Special Comments:

Items

Line Item	Job	Part	Supplier Part No	Item No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1				Miscellaneous Expense-Purchased Parts	Black Oxide Process (5 parts) RBE350A93-3317-20 tail rotor hub insert	Firmed	71475-180-0000	8/15/18	5 Ea	0 Ea	5 Ea	\$18.00/Ea	\$90.00

Line Item Note As per JL Menard

Grand Total: \$90.00

Order Notes

Plex 8/13/18 3:22 PM dart.lavoie.chantal